From:	"Carey, Curtis" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE;GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=4CB6F75253154BFC8AA889F8A36596ED-CAREY,CURT>
To:	Brooks
	Karl;Hague
	Mark
CC:	"Jackson, Robert W." <Jackson.Robertw@epa.gov>
Date:	8/1/2014 9:38:35 AM
Subject:	FW: Letters from St. Louis Airport Authority and USDAre West Lake and Bridgeton attached
Attachments:	Letter to Bridgeton Landfill.pdf
	Letter to Dan Gravatt.pdf
	Letter to Dan Wall.pdf
	Letter to Gerard Slay.pdf

In case you haven't seen the letter from the STL Airport Authority to Bridgeton landfill (first attached document), it is worth reading in preparation for next week.

Best,
Curtis

LAMBERT-ST. LOUIS
INTERNATIONAL AIRPORT®

Rhonda Hamm-Niebruegge
Director

Francis G. Slay
Mayor
City of St. Louis

February 20, 2013

CERTIFIED MAIL

Jo Lynn White
Bridgeton Landfill LLC
Rock Road Industries, Inc.
Bridgeton Transfer Station, LLC
15880 N. Greenway-Hayden Loop
Suite 100
Scottsdale, AZ 85260

Sean Torrey
Environmental Manager
Republic Services
Bridgeton Landfill LLC
13570 St. Charles Rock Road
Bridgeton, MO 63044

Re: Negative Easement and Declaration of Restrictive Covenants Agreement
Lambert-St. Louis International Airport

Dear Ms. White and Mr. Torrey:

This letter is to notify you that The City of St. Louis ("City"), the owner and operator of Lambert St. Louis International Airport ("Airport") believes certain of the activities conducted by Bridgeton Landfill LLC, in responding to odors, are being performed in violation of the Negative Easement and Declaration of Restrictive Covenants Agreement with the City, dated April 6, 2005 ("Airport Easement"). The Airport Easement provides that there shall be no new or additional dumping or depositing of Putrescible Waste above, upon, on or under the landfill property. The purpose of the Airport Easement is to reduce or mitigate the serious potential harm to flight activities at the Airport that could be caused by wildlife or birds on or from the landfill property. This easement was mandated by the FAA Record of Decision for the Airport and the Airport is required to enforce it.

In recent e-mail correspondence received by Airport staff from the landfill staff, and from a review of your Bridgeton Landfill website, we learned of the large scope of the ongoing and proposed actions at the landfill. These actions include digging and therefore clearly must have involved and will continue to involve exposing and depositing Putrescible Waste on the landfill property in violation of the Airport Easement.

The Airport is prepared to meet, without delay, to discuss the specifics of the risks posed by these activities and to work out a mechanism to move forward without violating the terms of the Airport Easement.

Exposing and depositing Putrescible Waste at the landfill could create an attractant for birds and other wildlife and that this activity cannot be conducted in the vicinity of the Airport. The Airport understands Bridgeton Landfill must address the odors from the landfill, however if the plan to address the odors involves digging into the landfill, removing and depositing Putrescible Waste, the Airport has an aviation safety concern. The Airport will bring in wildlife specialists from the U.S. Department of Agriculture ("USDA") to conduct a study, and involve the FAA so that any activities conducted will be sensitive to and ensure the safety of air traffic near the Airport. We are aware that Bridgeton Landfill needs to work quickly on odor issue, but the very real safety issues for the Airport cannot be ignored.

We request that any depositing or dumping of Putrescible Waste above, upon, or on the landfill property (whether in containers, on tarps, in trucks, or otherwise) cease and the discussions commence immediately with the Airport regarding any remediation plans.

Please call my office at (314) 551-5008 to schedule the meeting date.

Sincerely,

Cornell F. Mays, AIA
Airport Deputy Director
Planning & Development

cc: **Environmental Protection Agency**
Dan Gravatt
Audrey B. Asher

Federal Aviation Administration
Mark Schenkelberg, P.E.

Husch Blackwell Sanders LLP
Joseph G. Nassif
Amy L. Wachs

Lambert-St. Louis Airport Authority
Rhonda Hamm-Niebruegge
Gerard Slay
Joletta Golik
Mario Pandalfo
Joseph Niemann

Lathrop & Gage
Jessica E. Merrigan

Missouri Department of Health and Senior Services
Gail Vasterling

Missouri Department of Natural Resources
Chris Nagel, Bureau of Solid Waste Management
Paul Jeffrey, Regional and Satellite Office Coordinator
Joe Trunko, St. Louis Regional Office

Spencer Fane Britt & Brown LLP
Michael Hockley

St. Louis County Department of Health
Mike Zlatic
Katrina Donegan
Laura Yates

United States Department of Agriculture
Alec Sonnek

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City of St. Louis Airport Authority

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Rhonda Hamm-Niebruegge
Director

Francis G. Slay
Mayor
City of St. Louis

September 20, 2010

Mr. Daniel Gravatt
Project Manager/Environmental Scientist
U.S. EPA – Region 7
901 North 5th Street
Kansas City, Kansas 66101

Re: West Lake Landfill: Comments on Work Plan for Supplemental Feasibility Study

Dear Mr. Gravatt:

As requested, the City of St. Louis ("the City"), the owner and operator of Lambert-St. Louis International Airport® ("Airport") has reviewed the June 4, 2010 Work Plan for Supplemental Feasibility Study Radiological-Impacted Material Excavation Alternatives Analysis: West Lake Landfill Operable Unit-1 ("Work Plan"). The City supports the Environmental Protection Agency's ("EPA") evaluation of remedial alternatives to address radiologically contaminated materials located at the West Lake Landfill (formerly known as the Bridgeton Landfill). The City takes seriously the presence of radioactive materials at the West Lake Landfill and the long term impact those radioactive materials may have on water resources. The City urges EPA to select a remedy for the cleanup of the West Lake Landfill radioactive wastes that is practical and ensures that these wastes no longer pose a threat to human health and the environment. However, the City must ensure that any action involving the West Lake Landfill does not unnecessarily jeopardize the City's public safety obligations with respect to Airport and its operations.

The Federal Aviation Administration ("FAA") and United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services ("USDA") previously determined that the West Lake Landfill was a hazardous wildlife attractant for the Airport. *See* June 2004 Lambert – St. Louis International Airport Wildlife Hazard Assessment for the Bridgeton Sanitary Landfill. The West Lake Landfill is located, at its closest point, within approximately 9,166 feet of Airport Runway 11/29 (formerly 12W/30W), which is inconsistent with FAA runway siting guideline requiring a 10,000 foot separation radius. *See* FAA Advisory Circular 150/5200 33B (Hazardous Wildlife Attractants on or near Airports). The FAA, in a September 1998 Record of

Decision ("1998 FAA ROD") concerning expanded operations at the Airport, directed the City to mitigate the West Lake Landfill to protect aircraft from bird strikes at the Airport. *See* September 30, 1998 FAA Record of Decision: Lambert-St. Louis International Airport, pg. 42 - 43. Pursuant to the requirements of the 1998 FAA ROD, the City entered into the Negative Easement Agreement ("NEA") with the Bridgeton Landfill operators, at significant cost, to prohibit depositing or dumping of new or additional putrescible waste on the entirety of the property after August 1, 2005, and to require the landfill operators to comply with laws and regulations concerning proper landfill cover, so as to reduce or mitigate wildlife hazards to aircraft and airport facilities. *See* Negative Easement Agreement at pg. 2 – 3. The restrictive covenants in the NEA for the Bridgeton Landfill, along with other FAA required programs, have successfully mitigated aircraft bird strikes at the Airport, and particularly runway 11/29 (formerly 12W/30W). *See* Lambert St. Louis International Airport 2005 – 2010 Bird Strike Report Summary. Although these FAA restrictions and requirements may be mentioned as guidance in the feasibility study undertaken at the insistence of EPA, we are informed that these restrictions should be considered applicable or relevant and appropriate requirements for remedy selection purposes.

After consultation with Airport engineers and USDA Wildlife Services staff, the City believes that the excavation alternatives described in the Work Plan would adversely affect wildlife mitigation measures taken by the Airport to protect aircraft from bird strikes; thereby placing the City in violation of the 1998 FAA ROD requiring that such mitigation efforts be undertaken and maintained. In addition, such action on the part of the former landfill operators would violate the NEA. The primary issue here is aircraft and passenger safety. Bird studies conducted by the USDA have identified 11 of the top 15 most hazardous bird species to aircraft (damage and effect on flight) at the West Lake Landfill and surrounding areas. Many of these bird species, which include vultures, geese, hawks, gulls, owls and pigeons, have been reported in the approximately 600+ bird strike incidents that have occurred at the Airport since the 1990s. The USDA Wildlife Service has advised the City that uncovered radiologically impacted municipal waste at the West Lake Landfill will serve as a food attractant for a variety of bird species and increase the risk of bird/aircraft strikes at the Airport. *See* September 17, 2010 USDA letter to the Airport.

The Work Plan contemplates that municipal waste in the landfill will be removed by excavation and disposed on the property during the creation of the on-site engineered disposal cell, in direct violation of Paragraph 1 of the NEA. Further, the radioactive municipal waste materials will remain exposed at the site throughout the duration of excavation and landfill activities without a daily cover, which is in violation of Missouri Solid Waste Regulation 10 CSR 80-3 (17)(C)(1) and Paragraph 2 of the NEA. Moreover, based on anticipated waste volumes and available funding, the response action contemplated in the Work Plan would, rationally speaking, appear to be a ten to twenty year effort. The FAA considers any facility handling uncovered quantities of municipal solid waste outside, even if only for a short time, incompatible with safe airport operations if they are located within a 10,000 foot radius of an active airport runway. *See* FAA Advisory Circular 150/5200 33B (Hazardous Wildlife Attractants On or Near

Airports) at pg. 4, § 2 – 2. Thus, the presence of uncovered municipal solid waste at the West Lake Landfill may place the City in violation of 1998 FAA ROD. The Work Plan does not explain how the Respondents/Operators will comply with the terms of the NEA or Missouri Solid Waste Regulation daily landfill soil cover requirements during excavation and transport of contaminated municipal solid waste from the landfill. Any remediation objective selected by EPA for the West Lake Landfill must ensure that the remediation activities do not create a wildlife attractant that presents an intolerable risk of aircraft bird strikes at the Airport.

The excavation, movement and transportation of radiologically impacted municipal waste required during the response action at the West Lake Landfill is consistent with the characteristics of an operational solid waste landfill, as described in the Missouri Solid Waste Regulations. As a result, certain operational requirements (i.e. daily cover and surface water management) and landfill site selection standards (i.e. airport safety, flood plains, wetlands, seismic impact zones and unstable areas) will apply to the excavation alternatives described in the Work Plan. *See* 10 CSR 80-3.010 (4)(B)(1 – 6); 10 CSR 80-3.010(1)(C) (classifying non-compliant sanitary landfills as open dumps that are prohibited by law).

Missouri Solid Waste Regulations prohibit landfill operations within a 10,000 foot (3,048 meters) radius of any airport runway end used by turbojet aircraft unless the operators can demonstrate that the landfill operations pose no bird hazard to aircraft. *See* 10 CSR §80-3 (Sanitary Landfill). The Respondents/Operators must demonstrate the remediation activities at the Bridgeton Landfill, portions of which are located within a 10,000 foot radius of the Airport's runway 11/29, do not pose a hazard to aircraft using the Airport's facilities; or at the very least, do not increase the likelihood of bird/aircraft collisions. *See* Lambert – St. Louis International Airport Expansion Runway to Landfill Distance Study. It is very likely that the excavation and disposal alternatives contemplated in the Work Plan will disrupt the wildlife mitigation efforts undertaken by the City pursuant to the 1998 FAA ROD, and increase the likelihood of bird/aircraft collisions at the Airport. FAA Advisory Circular 150/5200 – 33B suggests that Respondents/Operators will not be able to mitigate the risk of wildlife strikes to aircraft during excavation and disposal activities at the Bridgeton/West Lake Landfill; as no facility has been able to demonstrate an ability to reduce and sustain hazardous wildlife to levels that existed before the putrescible–waste landfill began operating. *See* Hazardous Wildlife Attractants On or Near Airports - Advisory Circular 150/5200 – 33B. In fact, FAA does not even allow landfill operators to conduct demonstrations of experimental wildlife control measures within a 10,000 foot radius of an airport because of this perfect failure rate. *Id.* Thus, it seems that the Respondents/Operators will not be able to demonstrate that excavation and landfill activities at the Bridgeton/West Lake Landfill do not pose a threat to aviation operations at the Airport, particularly since the FAA /USDA have already determined that the municipal waste operations at the Bridgeton/West Lake Landfill are a hazardous wildlife attractant for the Airport. *See*

June 2004 Lambert – St. Louis International Airport Wildlife Hazard Assessment for the Bridgeton Sanitary Landfill.[1]

Missouri Solid Waste Regulations also require all operating solid waste disposal sites to cover "disposed solid waste with six inches of earthen material at the end of each operating day, or at more frequent intervals, as necessary, to control disease vectors, fires, odors, blowing litter and scavenging . . .". *See* 10 CSR 80-3 (17)(C)(1). Missouri's Solid Waste Regulations should be applicable to the remediation activities contemplated at the West Lake Landfill, which consist of exposing municipal/putrescible waste that may attract wildlife, disease vectors, blowing liter and risks of fire. The risk of creating a wildlife attractant near the Airport mandates that Respondents/Operators comply with Missouri daily landfill cover requirements during any excavation or disposal activities at the West Lake Landfill. The necessity of compliance with 10 CSR 80-3(17) may further complicate the remediation objectives by creating additional quantities of radiologically contaminated soils for disposal and increase cost and duration estimates contemplated under the Work Plan. However, any failure to comply with the daily cover requirements would create an unacceptable risk to aviation operations at the Airport. The lack of daily cover would also contribute to the distribution of low level radioactive contamination throughout the site by allowing surface waters to come in contact with uncovered radiologically contaminated municipal waste material, and possibly air blown dust, without adequate controls. Missouri Solid Waste Regulations require all active solid waste disposal sites to minimize environmental hazards and conform to applicable ground and surface water quality standards. *See* 10 CSR 80-3 (8). The Work Plan does not explain how the Respondents/Operator's will manage daily landfill cover requirement, or the surface waters and wind blown dust that come into contact with radiologically-impacted waste materials exposed during remediation activities.

The City is also concerned that Respondents/Operators have not identified a viable disposal location for the radiologically-impacted municipal wastes and soils that will be excavated from the West Lake Landfill. The proposed on-site engineered disposal cell location (OU-2 Stockpile Area) is not an appropriate site for long term storage of the radiologically impacted waste due to regulatory and capacity restrictions, and there is no licensed treatment, storage or disposal facility that may accept a mixture of radiologically impacted soils and municipal waste. The Work Plan indicates that the existing OU-2 Stockpile Area is the only location on the West Lake Landfill property that the on-site engineered disposal cell may be sited due to the geomorphic flood plain. However, this location, approximately 8,000 feet from the Airport, is incompatible with

[1] Similar to the Missouri solid waste regulations, the Missouri legislature specifically promulgated legally applicable requirements prohibiting the creation or establishment of airport hazards within 2 miles (10,560 feet) from an airport boundary. *See* Mo. Rev. Stat. § 305 (Aircraft and Airports). Local regulations further prohibit the use of land or water near the Lambert – St. Louis International Airport in such a manner as to create bird strike hazards, or otherwise in any way endanger or interfere with the landing, takeoff, or maneuvering of any aircraft intending to use the airport. *See* St. Louis County, Missouri Ordinance 1003.161 (Air Navigation Space Regulations – including height restrictions for structures near the Airport). To the extent remediation activities at the Bridgeton Landfill present a risk of bird/aircraft strikes, such activities are contrary to the interests of public health, safety and general welfare; and a violation of Missouri zoning laws.

state and federal regulations that prohibit the placement of a new solid waste disposal site within a 10,000 foot radius of an active runway, with one statute requiring a minimum separation 6 miles between the airport and a new disposal location. *See* 40 CFR §258.10 (Airport Safety); 40 CFR §258.16 (Closure of Unsafe Landfills); 10 CSR §80-3 (Sanitary Landfill); 49 USC 44718 (Structures Interfering with Air Commerce); FAA Advisory Circular 150/5200 – 34A (Construction or Establishment of Landfills Near Public Airports), *see also*, Negative Easement Agreement. Furthermore, it is not clear that the OU-2 Stockpile Area could accommodate the quantity of radiologically impacted waste (also unknown) that will be excavated from Radiological Areas 1 and 2, which would include additional quantities of contaminated landfill cover material generated on a daily basis. The process of selecting and evaluating a location for the on-site engineered disposal cell must comply with state and federal landfill siting requirements; but sets forth no methodology to address the direct prohibition against placement of a new landfill disposal site within a 10,000 foot radius of an active airport runway.

The EPA Responsiveness Summary and Work Plan also indicate that Respondents/Operators are aware of no licensed treatment, storage or disposal facility that can accept radiologically impacted soils and municipal solid waste; and there are no feasible methods of separating contaminated soils from municipal waste without creating additional unnecessary risks of harm to human health or the environment.

As a final comment, we respect the possibility, however unlikely, that the Earth City Levee System, which protects the area from a 500 year flood event, might be breached and flood waters might cover the current landfill site. However, when the City last reviewed EPA's prior selected remedy, it learned that such a circumstance would have little if any environmental significance in light of steps that would be taken to further cap the existing site under EPA Preferred Alternatives L4/F4. Recognizing that EPA must deal with possibilities and weigh their likelihood at times, the reality is that bird strikes happen at the Airport, even with the current reduction in attractant sites and mitigation measures. No one wants to be in the position of trading risks associated with an unlikelihood or theoretical possibility for reality. Any balancing of risks must take reality into account.

The City reserves the right to amend or provide additional comments concerning the proposed remediation activities at the West Lake Landfill. The City also requests that EPA and/or Respondents provide regular updates concerning their progress toward selecting a remedy for the West Lake Landfill.

Respectfully submitted,

Rhonda Hamm-Niebruegge
Director of Airports

Kevin C. Dolliole
Director

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Francis G. Slay
Mayor
City of St. Louis

June 26, 2006

Daniel R. Wall
Project Manager
U.S. EPS - Region 7
901 North 5th Street
Kansas City, KS 66101

Dear Mr. Wall:

The City of St. Louis appreciates the opportunity to review and comment on the *Proposed Plan: West Lake Landfill Site Operable Units 1 and 2* ("Proposed Plan") regarding the proposed approach by the U.S. Environmental Protection Agency ("EPA") to resolving the radiological contamination of Operable Unit 1 within the Bridgeton landfill.

Because portions of the Bridgeton landfill are within a certain distance from the runways at Lambert-St. Louis International Airport ("Airport"), the City of St. Louis, owner and operator of the Airport, has entered into agreements for the control of wildlife at the landfill: (1) the Negative Easement and Declaration of Restrictive Covenants Agreement (April 6, 2005); (2) the Right-of-Entry Easement Agreement for Control of Animal Damage on Private Property (April 6, 2005); and (3) an agreement with the U.S. Department of Agriculture, Animal and Plant Health Inspection Services, Wildlife Services ("USDA-APHIS-WS") (March 21, 2005). The thrust of those agreements is to close certain areas of the Bridgeton landfill to the deposit of putrescible waste, to secure the services of USDA-APHIS-WS to establish a bird repelling program for the landfill, and to secure access to the area for the City and its agents in order to monitor and repel birds and other hazardous wildlife.

The EPA's preferred alternatives for addressing Operable Unit 1, identified in the Proposed Plan as Alternatives L4 and F4, should not interfere with the City's bird repelling program for the landfill. However, the City notes that one of the alternatives identified in the Proposed Plan, Alternative L6, would require uncovering portions of the landfill during the excavation phase, which could attract birds and other animals. Should EPA, as a result of the comments received on the Proposed Plan, move away from the Preferred Alternatives and consider adopting Alternative L6 the City would appreciate a further opportunity to comment on the matter and to participate in a discussion with EPA regarding how EPA's goals can be achieved without creating safety hazards to aircraft using the Airport.

We appreciate your attention to our concerns.

Respectfully submitted,

Kevin Dolliole
Director
Lambert-St. Louis International Airport

cc: G. Slay
J. Golik

USDA

United States Department of Agriculture

Animal and Plant Health Inspection Service

Wildlife Services

11579 Navaid Road
Bridgeton, MO
63044

Gerard Slay
Senior Deputy Director
Lambert-St. Louis International Airport
P.O. Box 10212
St. Louis, MO 63145

September 17, 2010

Mr. Slay,

I am writing this letter in response to the alternatives for radioactive waste remedial action at the Bridgeton Sanitary Landfill (BSL) that are presented in the United States Environmental Protection Agency (EPA) Supplemental Feasibility Study (SFS) and discussed at our meeting on September 7, 2010. Both alternatives involve uncovering and transporting radioactive material along with municipal solid waste. I recommend against any action that will expose municipal waste because of the increased potential for bird strikes to aircraft. If the final determination is made to uncover municipal waste, then a bird hazard reduction program will be necessary. I am satisfied with the Selected Remedy (Alternative L4) in the EPA Record of Decision (ROD) (May 2008) if the regrading does not expose municipal waste.

In June of 2004, the USDA-APHIS-Wildlife Services (WS) completed a Wildlife Hazard Assessment (WHA) for the BSL after a one year, comprehensive study of bird use on and around the landfill. A greater average number of birds per survey were observed on the exposed trash area than any other of the 50 survey points. The WHA also indicates: *Compared with the other habitats, BSL contains a higher concentration of birds due to the constant presence of the exposed area as a feeding source.*

In December 2004, the landfill stopped accepting municipal solid waste. WS sustained the bird monitoring and beginning in October 2005, initiated direct control efforts. Dawn to dusk wildlife mitigation continued until October 2006, six months after the opening of runway 11/29, in order to meet the requirements in the U. S. Department of Transportation ROD (September 30, 1998). The WS summary report generated at the conclusion of this mitigation project found *the permanent closure of the exposed area was the most important change on the landfill that affected bird usage and, subsequently, the level of potential threats to aviation.*

Exposing municipal waste will serve as a food attractant and visual cue for a variety of bird species, most notably European starlings and gulls, both of which can pose a significant hazard to aircraft. As starlings have historically been the most prevalent species at the BSL, their numbers could reasonably be expected to rise again to threatening levels. Areas of bare soil will attract pigeons and doves. An increase in mice and rats could also lead to an increase in raptors foraging at the site. In the 19 year span from 1990-2008, gulls are reported as the most commonly struck species nationally, followed by pigeons and doves, then raptors. Ring-billed gull, rock

pigeon, and red-tailed hawk are species considered as high risk and were frequently observed during the time WS worked on the BSL property.

Something else to consider in the SFS alternatives is exposure of wildlife to radioactive materials. I have made site visits to both the Weldon Spring and St. Louis Airport Site projects where contractors had expressed concern that birds would be exposed to excessive radiation and take radioactive substances off site. In addition to their foraging and loafing activity, the potential exists for birds to use contaminated material for nest construction.

To reduce the potential for an increase in bird/aircraft strike risk, I recommend against uncovering municipal waste. If that becomes necessary, then a bird hazard reduction program should be in place for the duration of the project.

Sincerely,

Robert C. Alexander
Wildlife Biologist